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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,337	08/04/2003	Bo-Yong Chung	50432/DBP/Y35	6765

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EXAMINER

LAO, LUN YI

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,337

Applicant(s)

CHUNG ET AL.

Examiner

Lao Y Lun

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/4/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-37 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 20-23 of copending Application No. 10/952,894. Although the conflicting claims are not identical, they are not patentably distinct from each other because they claim the same subject matter: the display device comprising a first transistor(a first switch) having a main electrode and a control electrode; a capacitor coupled between the main electrode and the control electrode of the first transistor(a first switch); a second transistor; a first switching element; a second switching element and a third switching element(see claims 20-23).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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3. Claims 1-37 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/942,320. Although the conflicting claims are not identical, they are not patentably distinct from each other because they claim the same subject matter: the display device comprising a first transistor (first switch) having a main electrode and a control electrode; a capacitor coupled between the main electrode and the control electrode of the first transistor (first switch); a second transistor; a first switching element; a second switch element (a third transistor) and a third switching element (a fourth transistor) (see claims 1-3).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 1-37 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/971,678. Although the conflicting claims are not identical, they are not patentably distinct from each other because they claim the same subject matter: an EL display device comprising a first switch having a main electrode and a control electrode; a capacitor coupled between the main electrode and the control electrode of the first transistor; a second transistor; a first switching element (a third transistor); a second switch element (a fourth transistor) and a third switching element (a fifth transistor) (see claims 8 and 11).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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5. Claims 1-37 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/953,014. Although the conflicting claims are not identical, they are not patentably distinct from each other because they claims the same subject matter: The copending application teach the display device comprising a first transistor(a driving transistor); a capacitor; a second transistor(a compensation transistor); a first switching element; second switch element and a third switching element)(see claims 1-3).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 29, 31 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Koyama(US 20020047581).

As to claims 29, 31 and 34, Koyama teaches a display device comprising: a display element(OLED, 106) for displaying a portion of an image in response to a current being applied; a first transistor(104) having a main electrode and a control

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electrode, and coupled between a voltage source(V_i) and the display element(OLED); a capacitor(107) coupled between the main electrode and the control electrode, wherein the first transistor(104) is capable of generating the current in response to a charge in the capacitor(107); and a first switching element(105) coupled between the first transistor(104) and the display element(106) to interrupt the current to the display element(106) while charging the capacitor(107) using a data voltage representative of the image portion(see figures 1-4 and paragraphs 152-153, 165 and 173-185).

As to claim 31, Koyama teaches a third switching element(103) coupled to a second selection signal(G_{aj}), wherein, when the second selection signal(G_{aj}) is activated, the third switching element(103) allows the data voltage to be applied to the capacitor(107) for charging and the first switching element(105) is turned off to prevent the current from flowing to the display element(106)(see figures 1-4 and paragraphs 152-153, 165 and 173-185).

As to claim 34, Koyama teaches the first switching element is turned on to allow the current to flow to the display element when the second selection signal is un-activated after the capacitor has been charged using the data voltage(see figures 1-4B).

8. Claims 29, 31 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Dawson et al(6,229,506).

As to claims 29, 31 and 34, Dawson et al teach a display device comprising: a display element(OLED, 380) for displaying a portion of an image in response to a current being applied; a first transistor(365) having a main electrode and a control

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electrode, and coupled between a voltage source(VDD) and the display element(OLED, 380); a capacitor(355) coupled between the main electrode and the control electrode, wherein the first transistor(365) is capable of generating the current in response to a charge in the capacitor(355); and a first switching element(375) coupled between the first transistor(365) and the display element(380) to interrupt the current to the display element(380) while charging the capacitor(355) using a data voltage representative of the image portion(see figures 11, 3; column 4, lines 41-68 and column 5, lines 1-31).

As to claim 31, Dawson et al teach a third switching element(360) coupled to a second selection signal(320), wherein, when the second selection signal(320) is activated, the third switching element(360) allows the data voltage to be applied to the capacitor(355) for charging and the first switching element(375) is turned off to prevent the current from flowing to the display element(380)(see figures 11, 3; column 4, lines 41-68 and column 5, lines 1-31).

As to claim 34, Dawson et al teach the first switching element(375) is turned on to allow the current to flow to the display element when the second selection signal is un-activated after the capacitor has been charged using the data voltage(see figures 11, 3; column 4, lines 41-68 and column 5, lines 1-31).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Koyama et al(6,760,005) teach a display device having a precharge voltage.

Suzuki(6,369,786) teaches a precharge circuit(3).

Kane(6,229,508) teach a display device having a pixel circuit having a precharge driver.

Okuda(6,650,060) teach an EL display having a first transistor(12) and a first switch(17) located between the first transistor(12) and a display element(11).

Koyama(6,809,482)) teach an EL display having a first transistor(106) and a first switch(107) located between the first transistor(106) and a display element(108).

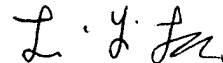
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi Lao whose telephone number is 571-272-7671. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 22, 2005

A handwritten signature in black ink, appearing to read 'L. Y. Lao', written in a cursive style.

Lun-yi Lao
Primary Examiner